Half Hollow Hills School District

Building Formal Pre Observation

Id	Teacher	Building	Department	Cert Type	Tenure	Date Opened	Observation Date	Observer	Date Closed
10486	Mary Redden	HS East (061)	Sped-S	Permanent	Non Tenured	9/12/2017	11/15/2017	Patrick Kiley-Rendon	11/16/2017

Lesson Plan Content

Briefly describe the students in this class, including those with special needs? How have you used this information to plan for this lesson? (Component 1b)

This is an ICT 9th grade Biology Classroom with 17 students who will take the Living Environment Regents. It contains nine students with special needs, and eight general education students. The disabilities of students with needs are OHI, LD, and autism. One student has allergies and asthma. This lesson has been planned to help support the needs of each student in this class by incorporating each learning modality. Visuals aides and selected lesson notes will be used to help assist students obtain and process information. Higher level questioning will be incorporated to promote meta-cognition. This lesson is a regents leveled biology lesson.

Why are these goals suitable for this group of students? (Component 1c)

The goal of this lesson is to present regents level material in the area of biology to a blended class while meeting the needs of each learner during one class period. The goals are appropriate with the NYS science standards and have been created in preparation of the NYS regents exam. Goals for this lesson require students to activate their prior knowledge of cell structure. They will obtain, process, and retain new information about Osmosis and it's effects on a cell, and apply learned material to a generalized concept map of the cell membrane and cell transport.

How does this lesson support district priorities and state standards?

This lesson supports both NY State and district policies in providing students opportunities for learning experiences which will strengthen their analytical and comprehension skills in the area of Biology.

How do these goals relate to broader curriculum goals in the discipline as a whole or in other disciplines? (Component 1c)

Cellular Transport and Cell Organelles are all a part of Half Hollow Hills Living Environment Curriculum. Cellular Transport is part of the NYS Common Core Curriculum.

What difficulties do students typically experience in this area, and how do you plan to anticipate these difficulties? (Component 1a)

Certain students present difficulty sustaining attention and momentum while taking notes. In preparation, I have created skeleton notes designed to keep the student engaged in writing and understanding the key information, while alleviating the amount of writing necessary to complete the task. Also, we have visuals prepared, and well as a repeated attempt tp check for understanding by continued questioning throughout the lesson.

What instructional materials or other resources, if any, will you use? (Attach sample materials you will be using in the lesson.) (Component 1d)

1. Full notes on Cell Transport
2. Do Now (yesterdays material)
3. Skeleton Notes (Today's Lesson)
4. Concept Map
5. Exit Ticket (Review of Today's Material)

If applicable, describe how the planning of this lesson reflects recommendations made during prior informal/formal observations and professional conversations.

My collaborating teacher and I planned this lesson together. The decision of using skeleton notes has been a debate for a few weeks. The end result will be that only certain students use them if necessary. Also, a decision of reviewing the concept of diffusion two days in a row has been factored into the planning. Both days we will use several real world examples of how it works that would be realistic to the learner. There is debate as to whether or not adding active and passive transport with Osmosis and the Effects Osmosis has on the cell will be too much for one class period.

Teacher Comments

Teacher comments pertaining to observation setting. List any items you might want to call to the attention of the Administrator.

The class is a great group of students. They are easy to teach and very enjoyable bunch. They seem to do better with a more fast paced lesson tempo. It helps keep their attention.

Observational Focus (optional):

Half Hollow Hills School District

Building Formal Lesson Plan

Id	Teacher	Building	Department	Cert Type	Tenure	Date Opened	Observation Date	Observer	Date Closed
10485	Mary Redden	HS East (061)	Sped-S	Permanent	Non Tenured	9/12/2017	11/15/2017	Patrick Kiley-Rendon	11/15/2017

Desired Results

What are the goals for the lesson?

S.W. understand Cellular Transport, specifically Osmosis and Diffusion.

What do you want students to know, understand and be able to do?

Utilizing their notes, S.W. define Osmosis, Active and Passive Transport, and identify three effects that Osmosis has on the cell.

How does this lesson fit with a larger unit?

Cellular Transport and Cell Organelles are all a part of Half Hollow Hills Living Environment Curriculum. Cellular Transport is part of the NYS Common Core Curriculum.

Learning Plan

How do you plan to engage students in the content?

T.W. activate prior knowledge through questioning notes taken from previous class. S.W. answer questions using their notes on Cellular Transport and Diffusion.

What will you do?

Do Now

1. S.W. complete a 7 question quiz. The quiz will be a review of the cell membrane taken from previous day's lesson. T.W. use Wizard ™ to compose quiz, gathering cell membrane questions used in prior regents tests.

2. T.W. go over quiz with students. 9 mins

Activate prior knowledge

1. T.W. give directive, "open up to yesterday's notes."

2. S.W. utilize yesterday's notes to answer review questions about the cell membrane and diffusion.

Lead Ins and Pivotal Questions

T: "Yesterday we started talking and taking notes on Cell Transport."

T: "We talked about the cell membrane….

1. "Which is also known as the……?" (plasma membrane)
2. "And what is the function of the cell membrane? (to maintain homeostasis)
3. "And what kind of permeability does the cell membrane have?" (selective permeability)

T: "And we talked about two types of molecules that can and cannot transport easily across the cell membrane."

3. "Which kinds of molecules can transport easily?" (simple molecules)
4. "An example of a simple molecule would be?" (water, glucose, alcohol, CO2, lipid molecules, O2)
5. "No, which cannot transport easily?" (complex molecules)
6. "And an example of a complex molecule would be?" (proteins, starch / double sugars and larger)

T: "Then we talked about Diffusion, which is the movement of molecules or particles from an area of high concentration to an area of low concentration.

7. "Who thinks they can give us an example of how Diffusion works?" 4 mins

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1. T.W. hand out 2nd page of skeleton notes.
2. S.W. write their name and date at the top of the note sheet.

Today's Lesson Objective

Objective: Utilizing their notes, S.W. define Osmosis, Active and Passive Transport, and list three effects that Osmosis has on a cell.

T: "Today we're going to continue with our notes on Cell Transport, and begin to talk about Osmosis, Active, and Passive Transport."

1. Utilizing the SMart Board, T.W. project second page of notes on the board, and read them aloud to students.

2. As notes are read aloud, S.W. fill in important keywords and information regarding Osmosis, the Effects Osmosis has on the cell, as well as the definition of Active and Passive Transport.

3. S.W. use notes to help answer questions about Osmosis and it's effect on the cell, as well as define Active and Passive Transport.

12 mins

Application

1. T.W. hand out Cell Transport Concept Map
2. S.W. apply their knowledge of Cell Transport and complete a concept map on Cell Transport and the cell cycle.
3. T. and S.W. review concept map. 8 mins

Closing and Exit Ticket

T: "Today we learned about Osmosis, and the effects that Osmosis has on the cell."
"Tomorrow will will finish our cell transport notes, and discuss how Active and Passive Transport."

S.W. complete short answer questions about cell transport, diffusion, and osmosis. 5 mins

What will the students do?

S.W. complete Do Now (review quiz)

S.W. answer questions about yesterdays lesson on Diffusion.

S.W. continue to take notes on Cell Transport, specifically Osmosis.

S.W. answer questions about Osmosis and it's effects on the cell.

S.W. apply their knowledge of Cellular Transport to a Concept Map.

S.W. complete short answer questions about Osmosis, it's effect on the cell, as well as Active and Passive Transport.

Assigned Evidence

How do you plan to assess student achievement of the goals? What procedures will you use? (Use Upload Files on the Track Assignment view to include any tests or performance tasks, with rubrics or scoring guides. After Upload, use the edit button to put Lesson Plan in the File Description field.) How do you plan to use the results of the assessment?

T.W. follow lesson with 5 short answer open ended questions about Transport through the cell membrane.

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Building Formal Observation

Id	Teacher	Building	Department	Cert Type	Tenure	Period	Grade	Subject
10488	Mary Redden	HS East (061)	Sped-S		Permanent Non Tenured			

Date Opened	Observation Date	Observer	Date Closed	Score
9/12/2017	11/15/2017	Patrick Kiley-Rendon	11/17/2017	3.64

Select one rating for each criterion as they apply.
Ratings: (H) Highly Effective, (E) Effective, (D) Developing, (I) Ineffective, (N/O) Not Observable

Domain 1: Planning and Preparation

Demonstrating knowledge of content and pedagogy:

Ms. Redden displays a solid knowledge of topic taught and how it relates to other topics in the broader science curriculum. She related concepts within the discipline to one another. Ms. Redden's plan reflected an understanding of which concepts are central and which are peripheral. The lesson plan scaffolds skills and concepts to build student understanding. Ms. Redden selected appropriate strategies to engage students in the content.

Demonstrating knowledge of students:

Prior successes with this class have led Ms. Redden to value skeleton notes; she explains the benefits of them and how they are appropriate for this group of students. Students will listen to each other's answers and explanations, using peers as resources.

Setting instructional outcomes:

Instructional outcomes represent the big ideas for the unit but are tailored for the lesson. Ms. Redden's plan references previous lessons to sequence the outcomes. State standards are also referenced in the plans. Outcomes are specific, doable, and allow for informal assessment within the time allotted. Ms. Redden's lesson goals are clear and are written in the form of student learning. The knowledge and understanding gained will enable students to understand future units regarding cellular processes.

Demonstrating knowledge of resources:

Ms. Redden plans to use a skeleton packet and review questions for practice during the lesson. Ms. Redden's knowledge of the Smartboard provides students the opportunity to visualize the concepts that are being discussed.

Designing coherent instruction:

The lesson design has a clear structure from beginning to end and supports the instructional outcomes. The plans are extremely detailed, and their structure develops smoothly. The learning experience all align to the desired instructional outcomes. The lesson plan represents the coordination of Ms. Redden's content knowledge, use of materials and to enhance instruction. The activities present students with opportunities for high-level thinking. A series of examples were designed to engage students at various levels of understanding. Ms. Redden considered the different learning needs of her students to determine materials.

Designing student assessments:

The informal assessments planned allow students to demonstrate their understanding through writing, presentation, and oral response. The examples planned provided suitable scaffolding for varying levels of difficulty/learning styles to meet the needs of all learners as well as to challenge students to gain a deeper understanding. The questions and assessments chosen for the lesson ranged in varying degree of difficulty to meet the needs of struggling learners as well as to challenge students to gain a deeper understanding. Ms. Redden planned to use an exit assessment to assess individual student learning at the close of the lesson and to use the information obtained to plan for future lessons.

1a: Demonstrating Knowledge of Content and Pedagogy	○H ●E ○D ○I
1b: Demonstrating Knowledge of Students	○H ●E ○D ○I
1c: Setting Instructional Outcomes	●H ○E ○D ○I
1d: Demonstrating Knowledge of Resources	○H ●E ○D ○I
1e: Designing Coherent Instruction	●H ○E ○D ○I
1f: Designing Student Assessments	○H ●E ○D ○I

Domain 2: The Classroom Environment

Creating an environment of respect and rapport:

Classroom interactions among the two teachers and her students were highly respectful.

The teachers shared a relatable situation (i.e. diffusion of cookie smell) that applied to the classroom setting in an appropriate manner (i.e. moving without energy). At various points in the lesson, the teachers inserted humor to capture student interest. Ms. Redden's voice and body language conveyed warmth and compassion. Students listened attentively to Ms. Redden, Dr. Stabile, and their peers during classroom discussions. Students worked well together as a class. Students offered each other assistance.

Establishing a culture for learning:

There were helpful science resources displayed throughout this shared classroom. Student's voices and teachers' responses conveyed interest and passion for correct answers. Ms. Redden shared lesson goals--focus on cell wall transport--with students from the start and throughout the lesson. The classroom culture allowed students to take risks and ask for assistance.

Managing classroom procedures:

It is evident that students follow established routine in Ms. Redden's classroom; they are familiar with the skeleton notes and class procedures. Transitions occurred seamlessly, with little loss of instructional time.

Managing student behavior:

Student behavior was entirely appropriate. Ms. Redden's monitoring of student behavior was subtle and preventative; she walked around spending time in each quadrant of the classroom.

Organizing physical space:

All students had an excellent view of the board. The seating arrangement was appropriate for the learning activity.

2a: Creating an Environment of Respect and Rapport	◉H ○E ○D ○I
2b: Establishing a Culture for Learning	○H ◉E ○D ○I
2c: Managing Classroom Procedures	○H ◉E ○D ○I
2d: Managing Student Behavior	○H ◉E ○D ○I
2e: Organizing Physical Space	○H ◉E ○D ○I

Domain 3: Instruction

Communicating with students:

Ms. Redden's explanation of content connected with students' knowledge and experience (e.g. use of Axe spray to explain passive transport, drawing of oxygen molecules on board). Ms. Redden's communication with students was clear and concise throughout the lesson, especially during the concept map review. She explained content using auditory, visual and kinesthetic approach allowing students to listen, observe and do in the lesson. They made use of analogies when explaining content. The teachers focused on vocabulary. Students contributed to the lesson by explaining concepts to their classmates (*Instead of us telling you, you tell us...*).

Using questioning / prompts and discussion:

During the lesson activity, Ms. Redden posed high quality questions to promote thinking and understanding and prompted students to make connections to their prior knowledge. Ms. Redden gave adequate wait time for students to respond and between the student and teacher response. Students were given ample wait time during questions to formulate their own responses before answers were given by peers, sometimes waiting a protracted time for quieter students to volunteer. Clarifying questions and prompts by Ms. Redden led several students to arrive at their own conclusions without giving them the answers. Throughout the lesson, Ms. Redden used a variety of questions and prompts to tap into students' prior knowledge to make connections to previous lessons. Ms. Redden provided feedback to students about the questions they asked and/or their participation in the discussion. After one student provide an answer to a challenging question (*definition of diffusion*), Ms. Redden had another student repeat the answer in a new voice.

Engaging students in learning:

The learning tasks and activities were aligned with the instructional goals. Ms. Redden used resources/materials to enhance the representation of the content or to support the lesson. Ms. Redden kept students active from one part of the lesson to another. There were multiple transitions, which kept students engaged and mentally active.

Using Assessment in Instruction:

Informal assessment was regularly used throughout the lesson. The activities and questions posed revealed students' understanding of the lesson goals. The use of both volunteers and non-volunteers provided opportunities for multiple students to participate in the classroom discussion and enabled multiple checkpoints to clarify student understandings as well as misunderstandings. Ms. Redden used the time during the activity as a checkpoint to verify student understandings as well as misunderstandings. A variety of feedback from both Ms. Redden and peers (e.g. *What do you think of that answer?*) advanced learning. Ms. Redden asked every student diagnostic questions using whole-class response to see at a glance which students did and did not understand.

Demonstrating flexibility and responsiveness:

Ms. Redden accommodated students' questions and requests for assistance. Based on students' progress, the teachers limited the lesson to diffusion and only introduced osmosis; the effects of osmosis will be covered the following day.

3a: Communicating with Students	○H ◉E ○D ○I
3b: Using Questioning and Discussion Techniques	◉H ○E ○D ○I
3c: Engaging Students in Learning	○H ◉E ○D ○I
3d: Using Assessment for Instruction	○H ◉E ○D ○I
3e: Demonstrating Flexibility and Responsiveness	○H ◉E ○D ○I

Domain 4: Professional Responsibilities

Ms. Redden reflected on aspects of her instruction and plans on making changes that will benefit both the special education and general education students (e.g. limiting skeleton notes who need it more).	
4a: Reflecting on Teaching	◉H ○E ○D ○I ○N/O
4b: Maintaining Accurate Records	○H ○E ○D ○I ◉N/O
4c: Communicating with Families	○H ○E ○D ○I ◉N/O
4d: Participating in a Professional Community	○H ○E ○D ○I ◉N/O
4e: Growing and Developing Professionally	○H ○E ○D ○I ◉N/O
4f: Showing Professionalism	○H ○E ○D ○I ◉N/O
Comments	
Observer Comments	
Teacher Comments	

This document requires Electronic Signatures.

Patrick Kiley-Rendon	**12/4/2017 11:36:08 AM**
Observer Signature	Date
Mary Redden	**12/4/2017 10:16:53 AM**
Teacher Signature	Date

Half Hollow Hills School District

Building Formal Post Observation

Id	Teacher	Building	Department	Cert Type	Tenure	Date Opened	Observation Date	Observer	Date Closed
10487	Mary Redden	HS East (061)	Sped-S	Permanent	Non Tenured	9/12/2017	11/15/2017	Patrick Kiley-Rendon	11/16/2017

Lesson Plan Content

1. Did the students learn what you intended for them to learn? What evidence do you have to support this?

The students retained specific information about Osmosis, as well as Active and Passive Transport. This is seen in their ability to apply the new material to a concept map generalizing cellular transport, as well as their exit tickets which was comprised of regents leveled questions pertaining to Cell Absorption, Osmosis, and Active Transport.

2. To what extent were your goals and objectives appropriate for your students?

I feel that this lesson was appropriate for the levels that are present in our classroom. Although the students have a relatively wide range of disabilities, I do think that the basic concepts were grasped by all.

3. Please comment on different aspects of your instructional delivery. To what extent were they effective? What would you do differently to improve the lesson? Include comments specific to Activities, Grouping of Students, and Materials and Resources.

Initially, I would have liked to have spent more time on the Do Now. I felt that some students, although understood the concept of Diffusion, had some trouble relating the information to the language used in the Do Now. This language will be seen on the regents.

Also, I don't believe the entire class should remain using skeleton notes. It's not necessary for everyone. I do think that they are essential for certain learners, however.

4. Please comment on your classroom procedures, student conduct, and your use of physical space. To what extent did these contribute to student learning?

We began our lesson with a Do Now, and we were properly prepared in setup which enabled us to get through multiple tasks in one period. When we take notes in class, the students that sit on the opposite end of the classroom from the Smart Board must get up to move seats for a centered view of the Board.

I feel the students were adequately prepared for the lesson, they had a good understanding of Diffusion from the prior day's lesson and were able to relate prior knowledge of active and passive transport from previous lessons of organelles and life functions.

5. Did you alter your plan? If so, how, and why?

Yes, initially I had planned to have the students list the effects that Osmosis has on a cell as part of my lesson objective. But as the lesson began, and noting some struggle for some with the prior day's comprehension of Diffusion, my collaborator and I decided to just focus on making sure the students have a firm understanding of the definitions of Osmosis and Active and Passive Transport, as well as review the cell membrane and it's function.

Teacher Comments

Teacher comments:

Thank you for coming in to see our introductory lesson on Osmosis. We appreciate your time, and we look forward to seeing you again soon!